

SEQUENCE LISTING

<110> HARVEY, BARRETT R.
GEORGIOU, GEORGE
IVERSON, BRENT L.

<120> COMBINATORIAL PROTEIN LIBRARY SCREENING BY
PERIPLASMIC EXPRESSION

<130> UTXB:715US

<140> UNKNOWN

<141> 2003-07-15

<150> 60/396,058

<151> 2002-07-15

<150> 09/699,023

<151> 2000-10-27

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<170> PatentIn Ver. 2.1

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<211> 17

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<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 1

caggaaacag ctatgac

17

<210> 2

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 2

gaattttctg tatgagg

17

<210> 3

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

Primer

<400> 3
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<210> 4
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 4
ctatgcggcc ccattca 17

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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 5
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<210> 6
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 6
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<210> 7
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 7
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<210> 8
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 8
Gln Thr Thr His Val Pro Pro
1 5

<210> 9
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 9
Gln Thr Thr His Val Pro Pro
1 5

<210> 10
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 10
Gln Thr Thr His Ser Pro Ala
1 5

<210> 11
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 11
Gln Thr Thr His Leu Pro Thr
1 5

<210> 12
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 12
Gln Thr Thr His Thr Pro Pro
1 5

<210> 13
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 13
Gln Thr Thr His Thr Pro Pro
1 5

<210> 14
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 14
Gln Thr Thr His Ile Pro Thr
1 5

<210> 15
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 15
Gln Thr Thr His Val Pro Pro
1 5

<210> 16

<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 16
Gln Thr Thr His Val Pro Ala
1 5

<210> 17
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 17
Gln Thr Thr His Ile Pro Ala
1 5

<210> 18
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 18
Gln Thr Thr His Leu Pro Ala
1 5

<210> 19
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 19
Gln Thr Thr His Val Pro Cys
1 5

<210> 20
<211> 741

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 20

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gatggaactg ttaaactcct gatctactac acatcaagat tacagtcagg agtcccatca 180
aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa ccaggagcaa 240
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aagcctgggg cctcagtga gatttcctgc aaagattctg gctacgcatt cagtagctct 480
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cctggagatg gagatactaa ctacaatggg aagttcaagg gcaaggccac actgactgca 600
gacaaatcct ccagcacagc ctacatgcag ctcagcagcc tgacctctgt ggactctgcg 660
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<210> 21

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 21

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Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
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Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Arg Asn Tyr
 20             25             30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
 35             40             45

Tyr Tyr Thr Ser Arg Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50             55             60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Gln Glu Gln
 65             70             75             80

Glu Asp Ile Gly Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Trp
 85             90             95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg Gly Gly Gly Gly
100             105             110

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser
115             120             125
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Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
 130 135 140
 Ser Val Lys Ile Ser Cys Lys Asp Ser Gly Tyr Ala Phe Ser Ser Ser
 145 150 155 160
 Trp Met Asn Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
 165 170 175
 Gly Arg Ile Tyr Pro Gly Asp Gly Asp Thr Asn Tyr Asn Gly Lys Phe
 180 185 190
 Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr
 195 200 205
 Met Gln Leu Ser Ser Leu Thr Ser Val Asp Ser Ala Val Tyr Phe Cys
 210 215 220
 Ala Arg Ser Gly Leu Leu Arg Tyr Ala Met Asp Tyr Trp Gly Gln Gly
 225 230 235 240
 Thr Ser Val Thr Val Ser Ser
 245

<210> 22
 <211> 741
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

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 gacggaactg ttaaattcct gatctactac acatcaagat tacagccagg agtcccatca 180
 aggttcagtg gcagtgggtc tggaacagat tattccctca ccattaacaa cctggagcag 240
 gaagatattg gcaattactt ttgccaacag ggcaatacgc ctccgtggac gttcgggtgga 300
 ggcaccaagc tggaaataaa acgtgggtgga ggtgggtctg atggtgggtg ttctggcggc 360
 ggcggctccg gtggtggtgg atccgaggtc caactgcaac agtctggacc tgagctggtg 420
 aagcctgggg cctcagtga gatttcctgc aaagattctg gctacgcatt caatagctct 480
 tggatgaact ggggtgaagca gaggcctgga cagggtcttg agtggattgg acggatttat 540
 cctggagatg gagattctaa ctacaatggg aaattcgagg gcaaggccat actgactgca 600
 gacaaatcct ccagcacagc ctacatgcag ctacagagcc tgacctctgt ggactctgcg 660
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<210> 23
 <211> 247
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic

Peptide

<400> 23

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Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
 1              5              10              15

Asp Arg Val Thr Val Ser Cys Arg Ala Ser Gln Asp Ile Arg Asn Tyr
      20              25              30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Phe Leu Ile
      35              40              45

Tyr Tyr Thr Ser Arg Leu Gln Pro Gly Val Pro Ser Arg Phe Ser Gly
      50              55              60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Asn Asn Leu Glu Gln
      65              70              75              80

Glu Asp Ile Gly Thr Tyr Phe Cys Gln Gln Gly Asn Thr Pro Pro Trp
      85              90              95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg Gly Gly Gly Gly
      100              105              110

Ser Asp Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
      115              120              125

Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
      130              135              140

Ser Val Lys Ile Ser Cys Lys Asp Ser Gly Tyr Ala Phe Asn Ser Ser
      145              150              155              160

Trp Met Asn Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
      165              170              175

Gly Arg Ile Tyr Pro Gly Asp Gly Asp Ser Asn Tyr Asn Gly Lys Phe
      180              185              190

Glu Gly Lys Ala Ile Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr
      195              200              205

Met Gln Leu Ser Ser Leu Thr Ser Val Asp Ser Ala Val Tyr Phe Cys
      210              215              220

Ala Arg Ser Gly Leu Leu Arg Tyr Ala Met Asp Tyr Trp Gly Gln Gly
      225              230              235              240

Thr Ser Val Thr Val Ser Ser
      245

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<210> 24

<211> 741

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 24

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gacggaactg ttaaattcct gatctactac acatcaagat tactgccagg agtcccatca 180
aggttcagtg gcagtgggtc tggaacagat tattccctca ccattaacaa cctggagcag 240
gaagatattg gcacttactt ttgccaacag ggcaatacgc ctccgtggac gttcgggtgga 300
ggcaccaagc tggaaataaa acgtggtgga ggtggttctg atggtggtgg ttctggcggc 360
ggcggctccg gtggtggtgg atccgaggtc caactgcaac agtctggacc tgagctggtg 420
aagcctgggg cctcagtga gatttcctgc aaagattctg gctacgcatt caatagctct 480
tggatgaact gggatgaagca gaggcctgga cagggtcttg agtggattgg acggatttat 540
cctggagatg gagattctaa ctacaatggg aaattcgagg gcaaggccat actgacagca 600
gacaaatcct ccagcacagc ctacatgcag ctcagcagcc tgacctctgt ggactctgcg 660
gtctatttct gtgcaagatc ggggttgcta cgttatgcta tggactactg ggggtcaagga 720
acctcagtca ccgtctcctc g 741
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<210> 25

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 25

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Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
 1             5             10             15
Asp Arg Val Thr Val Ser Cys Arg Ala Ser Gln Asp Ile Arg Asn Tyr
          20             25             30
Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Phe Leu Ile
          35             40             45
Tyr Tyr Thr Ser Arg Leu Leu Pro Gly Val Pro Ser Arg Phe Ser Gly
          50             55             60
Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Asn Asn Leu Glu Gln
          65             70             75             80
Glu Asp Ile Gly Thr Tyr Phe Cys Gln Gln Gly Asn Thr Pro Pro Trp
          85             90             95
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg Gly Gly Gly Gly
          100            105            110
Ser Asp Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
          115            120            125
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
          130            135            140
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Ser	Val	Lys	Ile	Ser	Cys	Lys	Asp	Ser	Gly	Tyr	Ala	Phe	Asn	Ser	Ser	145	150	155	160
Trp	Met	Asn	Trp	Val	Lys	Gln	Arg	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Ile	165	170	175	
Gly	Arg	Ile	Tyr	Pro	Gly	Asp	Gly	Asp	Ser	Asn	Tyr	Asn	Gly	Lys	Phe	180	185	190	
Glu	Gly	Lys	Ala	Ile	Leu	Thr	Ala	Asp	Lys	Ser	Ser	Ser	Thr	Ala	Tyr	195	200	205	
Met	Gln	Leu	Ser	Ser	Leu	Thr	Ser	Val	Asp	Ser	Ala	Val	Tyr	Phe	Cys	210	215	220	
Ala	Arg	Ser	Gly	Leu	Leu	Arg	Tyr	Ala	Met	Asp	Tyr	Trp	Gly	Gln	Gly	225	230	235	240
Thr	Ser	Val	Thr	Val	Ser	Ser	245												